

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002-NM-132-AD; Amendment 39-13769; AD 2004-16-13]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model DHC-8-400, -401, and -402 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Bombardier Model DHC-8-400, -401, and -402 airplanes. This AD requires an inspection to determine the serial number of the spoiler lift dump valves installed on the inboard and outboard spoilers, and replacement of certain spoiler lift dump valves. This AD also provides for revising the airplane flight manual to include performance penalties, which allows the replacement of affected spoiler lift dump valves to be deferred. This action is necessary to prevent failure of the ground spoilers to deploy on the ground, which could result in overrunning the end of the runway in the event of a rejected takeoff. This action is intended to address the identified unsafe condition.

DATES: Effective September 13, 2004.

The incorporation by reference of a certain publication listed in the regulations is approved by the Director of the Federal Register as of September 13, 2004.

ADDRESSES: The service information referenced in this AD may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, 123 Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; at the FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, suite 410, Westbury, New York; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:
http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

FOR FURTHER INFORMATION CONTACT: Ezra Sasson, Aerospace Engineer, Systems and Flight Test Branch, ANE-172, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, suite 410, Westbury, New York 11590; telephone (516) 228-7320; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Bombardier Model DHC-8-400, -401, and -402 airplanes was published in the Federal Register on March 5, 2004 (69 FR 10375). That action proposed to require an inspection to determine the serial number of the spoiler lift dump valves installed on the inboard and outboard spoilers, and replacement of certain spoiler lift dump valves. That action also proposed to provide for revising the airplane flight manual to include performance penalties, which would allow the replacement of affected spoiler lift dump valves to be deferred.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. The FAA has duly considered the comments received.

Support for the Proposed AD

One commenter supports the proposed AD.

Request To Give Credit for Original Issue of Service Bulletin

One commenter requests that we give credit for accomplishing the proposed actions per the original issue of Bombardier Service Bulletin 84-27-12, dated September 7, 2001. The commenter states that doing the original issue of the service bulletin achieves the same intent as the later revision of the service bulletin, which is referenced in the proposed AD as the appropriate source of service information for the proposed actions, and no additional work is specified in the later revision of the service bulletin.

We concur that actions required by this AD that were done before the effective date of this AD per the original issue of Bombardier Service Bulletin 84-27-12 are acceptable for compliance with the corresponding requirements of this AD.

In addition, we have become aware that there are two identical service bulletins identified as Bombardier Service Bulletin 84-27-12, Revision "A"—one dated December 12, 2001 (as referenced in the proposed AD), and one dated October 23, 2003. Bombardier investigated this discrepancy and determined that Revision "A" of the service bulletin, dated December 12, 2001, was sent to Transport Canada Civil Aviation (TCCA), which is the airworthiness authority for Canada, for review and concurrence at the same time the Canadian airworthiness directive was issued. TCCA concurred with Revision "A" of the service bulletin; however, Bombardier did not receive a written acceptance of Revision "A" at that time. Thus, Revision "A" of the service bulletin was on hold and wasn't released until Bombardier requested and received a written confirmation of TCCA's acceptance of the service bulletin in October 2003. Revision "A" of the service bulletin was officially released on October 23, 2003. However, we recognize that it is possible that members of the public may have copies of Revision "A" of the service bulletin bearing the date December 12, 2001. Thus, we find it necessary to provide credit for actions done per Revision "A" of the service bulletin, dated December 12, 2001. Accordingly, we have revised paragraphs (a) and (b)(1) and Note 1 of this AD to refer to Revision "A" of the service bulletin, dated October 23, 2003, as the acceptable source of service information for the actions required by those paragraphs. We have also added a new paragraph (d), and re-identified subsequent paragraphs accordingly, to give credit for actions done per the original issue of the service bulletin, or Revision "A," dated December 12, 2001.

Conclusion

After careful review of the available data, including the comments noted above, we have determined that air safety and the public interest require the adoption of the rule with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

We estimate that 10 airplanes of U.S. registry will be affected by this AD.

It will take approximately 1 work hour per airplane to accomplish the required inspection to determine the serial number of the spoiler lift dump valves, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of this inspection on U.S. operators is estimated to be \$650, or \$65 per airplane.

For airplanes equipped with spoiler lift dump valves in the affected serial number range, it will take approximately 2 work hours per airplane to accomplish the required replacement, at an average labor rate of \$65 per work hour. Required parts will be provided by the parts manufacturer at no charge. Based on these figures, the cost impact of this replacement is estimated to be \$130 per airplane.

Should an operator elect to accomplish the AFM revision that allows deferral of the replacement, it will take approximately 1 work hour per airplane to accomplish, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of this AFM revision, if accomplished, will be \$65 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2004-16-13 Bombardier, Inc. (Formerly de Havilland, Inc.): Amendment 39-13769. Docket 2002-NM-132-AD.

Applicability: Model DHC-8-400, -401, and -402 airplanes; serial numbers 4005, 4006, 4008 through 4015 inclusive, and 4018 through 4052 inclusive; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of the ground spoilers to deploy on the ground, which could result in overrunning the end of the runway in the event of a rejected takeoff, accomplish the following:

Inspection To Determine Serial Number

(a) Within 45 days after the effective date of this AD, perform a one-time inspection of the spoiler lift dump valves on the inboard and outboard spoilers to determine the serial number, per Bombardier Service Bulletin 84-27-12, Revision "A," dated October 23, 2003.

(1) For any spoiler lift dump valve with a serial number from 5164 through 5264 inclusive or 5267 through 5279 inclusive, accomplish paragraph (b) of this AD.

(2) For any spoiler lift dump valve with a serial number outside the ranges specified in paragraph (a)(1) of this AD, no further action is required by this paragraph.

Replacement of Spoiler Lift Dump Valves

(b) For any spoiler lift dump valve with a serial number from 5164 through 5264 inclusive or 5267 through 5279 inclusive: Accomplish paragraph (b)(1) or (b)(2) of this AD.

(1) Except as provided by paragraph (b)(2) of this AD: Before further flight after the inspection required by paragraph (a) of this AD, replace the affected spoiler lift dump valve with a new or serviceable valve that has a serial number outside the range specified in paragraph (a)(1) of this AD, or with a valve having a serial number with the suffix "A," which indicates that the valve has been modified to correct the defect. Do this replacement per Bombardier Service Bulletin 84-27-12, Revision "A," dated October 23, 2003.

Note 1: Bombardier Service Bulletin 84-27-12, Revision "A," dated October 23, 2003, refers to Parker Service Bulletin 395800-27-229, dated September 11, 2001, as an additional source of service information for accomplishing the replacement of the spoiler lift dump valves. The Parker service bulletin is included within the Bombardier service bulletin.

(2) Do paragraphs (b)(2)(i) and (b)(2)(ii) of this AD.

(i) Before further flight after the inspection required by paragraph (a) of this AD, revise the Limitations section of the de Havilland DHC-8-400 airplane flight manual (AFM) to include the information on performance penalties included in Table 1 of this AD. This may be accomplished by inserting a copy of this AD into the AFM.

**TABLE 1.—PERFORMANCE PENALTY FOR
SUSPECT LIFT DUMP VALVES**

| Accelerate—Stop Distance | | |
|---------------------------------|--------------|------------------------------|
| Flap 5° | Increase 2% | (Figures 5-5-4 and 5-5-5). |
| Flap 10° | Increase 2% | (Figures 5-5-9 and 5-5-10). |
| Flap 15° | Increase 3% | (Figures 5-5-14 and 5-5-15). |
| Landing Distance | | |
| Flap 10° | Increase 3% | (Figures 5-11-1 and 5-11-4). |
| Flap 15° | Increase 5% | (Figures 5-11-2 and 5-11-4). |
| Flap 35° | Increase 11% | (Figures 5-11-3 and 5-11-4). |

(ii) Within 6 months after the effective date of this AD, do paragraph (b)(1) of this AD. Once the requirements of paragraph (b)(1) of this AD have been accomplished, the AFM revision required by paragraph (b)(2)(i) of this AD may be removed from the AFM.

Parts Installation

(c) As of the effective date of this AD, no person may install a spoiler lift dump valve having a serial number listed in paragraph (a)(1) of this AD, unless the valve's serial number includes a suffix of "A" to indicate that it has been modified to remove the defect that is the subject of this AD.

Actions Accomplished per Previous Issues of Service Bulletin

(d) Actions accomplished before the effective date of this AD per Bombardier Service Bulletin 84-27-12, dated September 7, 2001; and actions accomplished per Bombardier Service Bulletin 84-27-12, Revision "A," dated December 12, 2001; are considered acceptable for compliance with the corresponding actions specified in this AD.

Alternative Methods of Compliance

(e) In accordance with 14 CFR 39.19, the Manager, New York Aircraft Certification Office, FAA, is authorized to approve alternative methods of compliance for this AD.

Incorporation by Reference

(f) Unless otherwise specified in this AD, the actions shall be done in accordance with Bombardier Service Bulletin 84-27-12, Revision "A," dated October 23, 2003. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, 123 Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; at the FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, suite 410, Westbury, New York; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:
http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Note 2: The subject of this AD is addressed in Canadian airworthiness directive CF-2001-44, dated December 3, 2001.

Effective Date

(g) This amendment becomes effective on September 13, 2004.

Issued in Renton, Washington, on July 30, 2004.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-17980 Filed 8-6-04; 8:45 am]

BILLING CODE 4910-13-P